

IN THE CLAIMS

1-20 Cancelled

21. (Previously Added) A method for providing collaboration between a first user and a second user comprising:

receiving, at a web site, a request from the first user with a browser;
processing the request with information related to the first user to create a page with dynamic content;

copying the page with dynamic content into a copy server without changing any locators in the page, the copy server having the page with dynamic content as a copied page;

providing, to the first user, a locator for the copied page of the copy server, the locator allowing the first user to access the copied page from the copy server; and providing, to the second user, the locator for the copied page of the copy server, the locator allowing the second user to access the copied page from the copy server, the first user and the second user viewing versions of the same copied page; and

synchronizing access to the copied page to:

i) prevent race conditions between the first and second user for access to the copied page;
ii) to avoid redundant operations made by at least one of the first user and the second user to the copied page.

22. (New) A method for providing collaboration between a first user and a second user comprising:

receiving, at a web site, a request from the first user with a browser;
processing the request with information related to the first user to create a page with dynamic content;

copying the page with dynamic content into a copy server without changing any locators in the page, the copy server having the page with dynamic content as a copied page;

providing, to the first user, a locator for the copied page of the copy server, the locator allowing the first user to access the copied page from the copy server; and

providing, to the second user, the locator for the copied page of the copy server, the locator allowing the second user to access the copied page from the copy server, the first user and the second user viewing versions of the same copied page; and

synchronizing access to the copied page to block multiple users from operating on the copied page.

23. (New) The method of claim 22 wherein the locator is employed by the first user for modifying the copied page and the second user is blocked from modifying the copied page until the modifications performed by the first user are written to the copied page at the copy server.

24. (New) The method of claim 22 further comprising:

identifying a collaboration set of users having the ability to access the copied page, the first and second users included in the collaboration set; and

permitting only one of the first and second users from operating on the copied page.

25. (New) The method of claim 24 further comprising establishing a collaboration session by sending cookies between the copy server and the first and second user browsers, the copy server responsive to a collaboration server for sending cookies and identifying modifications to the collaboration set

26. (New) The method of claim 22 further comprising copying the copied page to each of the first and second users, the copied page residing on a respective

user browser, wherein each of the first and second users access the copied page on the respected user browser, and wherein the copy server allows one of the first and second users to be operating on the copied page at the copy server.

27. (New) The method of claim 26 wherein the second user corresponds to an agent browser responsive to the first user browser.

28. (New) The method of claim 22 further comprising:

providing an informational message to the second user when the first user is operating on the copied page at the copy server; and

unblocking the second user when the first user completes operating on the copied page at the copy server.

29. (New) The method of claim 22 further comprising:

determine which information of the copy page each of the first and second user is permitted to observe; and

filtering the content of the page displayed on the respective user browser of the first and second user.

30. (New) The method of claim 29 further comprising discriminating between the filtered versions of the copied pages by identifying the corresponding request for the copied page emanating from each of the first and second user.

31. (New) The method of claim 29 further comprising:

identifying the information to be limited in the copied page;

suppressing the identified information from the information sent to the browser of the second user by selectively sending according to the filter; and;

receiving a form including information corresponding to the suppressed information from the first user.

32. (New) The method of claim 22 wherein operating on the copied page further comprises identifying which of the first and second user is modifying the copied page.

33. (New) A data communications device for providing collaboration between a first user and a second user comprising:

 a web server operable to receive a request from the first user with a browser;

 a page processor operable to process the request with information related to the first user to create a page with dynamic content;

 a copy server operable to copy the page with dynamic content into a memory without changing any locators in the page, the copy server having the page with dynamic content as a copied page, the web server operable to provide, to the first user, a locator for the copied page of the copy server, the locator allowing the first user to access the copied page from the copy server; and to provide, to the second user, the locator for the copied page of the copy server, the locator allowing the second user to access the copied page from the copy server, the first user and the second user viewing versions of the same copied page; and

 an adapter in the web server operable to synchronize access to the copied page to block multiple users from operating on the copied page.

34. (New) The data communications device of claim 33 wherein the locator is operable by the first user for modifying the copied page and the second user is blocked from modifying the copied page until the modifications performed by the first user are written to the copied page at the copy server.

35. (New) The data communications device of claim 33 further comprising a collaboration server operable to identify a collaboration set of users having the ability to access the copied page, the first and second users included in the collaboration set, and

a blocking mechanism, responsive to the copy server, operable to permit only one of the first and second users from operating on the copied page.

36. (New) The data communications device of claim 35 wherein the collaboration server is further operable to establish a collaboration session by sending cookies between the copy server and the first and second user browsers, the copy server responsive to a collaboration server for sending cookies and identifying modifications to the collaboration set.

37. (New) The data communications device of claim 33 wherein the web server is further operable to copying the copied page to each of the first and second users, the copied page residing on a respective user browser, wherein each of the first and second users access the copied page on the respected user browser, and wherein the copy server allows one of the first and second users to be operating on the copied page at the copy server.

38. (New) The data communications device of claim 37 wherein the second user corresponds to an agent browser responsive to the first user browser.

39. (New) The data communications device of claim 33 wherein the copy server is further operable to:

provide an informational message to the second user when the first user is operating on the copied page at the copy server; and

unblock the second user when the first user completes operating on the copied page at the copy server.

40. (New) The data communications device of claim 33 further comprising a filter operable to determine which information of the copy page each of the first and second user is permitted to observe, the filter further operable to filter the content of the page displayed on the respective user browser of the first and second user.

41. (New) The data communications device of claim 40 wherein the filter further comprises filtering code operable to discriminate between the filtered versions of the copied pages by identifying the corresponding request for the copied page emanating from each of the first and second user.

42. (New) The data communications device of claim 41 wherein the filter is further operable to:

identify the information to be limited in the copied page;
suppress the identified information from the information sent to the browser of the second user by selectively sending according to the filter; and
receive a form including information corresponding to the suppressed information from the first user.

43. (New) The data communications device of claim 33 wherein the copy server is further operable identify which of the first and second user is modifying the copied page.

44. (New) A computer program product having a computer readable medium operable to store computer program logic embodied in computer program code encoded thereon for providing collaboration between a first user and a second user comprising:

computer program code for receiving, at a web site, a request from the first user with a browser;

computer program code for processing the request with information related to the first user to create a page with dynamic content;

computer program code for copying the page with dynamic content into a copy server without changing any locators in the page, the copy server having the page with dynamic content as a copied page;

computer program code for providing, to the first user, a locator for the copied page of the copy server, the locator allowing the first user to access the copied page from the copy server; and

computer program code for providing, to the second user, the locator for the copied page of the copy server, the locator allowing the second user to access the copied page from the copy server, the first user and the second user viewing versions of the same copied page; and

computer program code for synchronizing access to the copied page to block multiple users from operating on the copied page.

45. (New) A computer data signal having program code for providing collaboration between a first user and a second user comprising:

program code for receiving, at a web site, a request from the first user with a browser;

program code for processing the request with information related to the first user to create a page with dynamic content;

program code for copying the page with dynamic content into a copy server without changing any locators in the page, the copy server having the page with dynamic content as a copied page;

program code for providing, to the first user, a locator for the copied page of the copy server, the locator allowing the first user to access the copied page from the copy server; and

program code for providing, to the second user, the locator for the copied page of the copy server, the locator allowing the second user to access the copied page from the copy server, the first user and the second user viewing versions of the same copied page; and

program code for synchronizing access to the copied page to block multiple users from operating on the copied page.

46. (New) A data communications device for providing collaboration between a plurality of users comprising:

means for receiving, at a web site, a request from the first user with a browser;

means for processing the request with information related to the first user to create a page with dynamic content;

means for copying the page with dynamic content into a copy server without changing any locators in the page, the copy server having the page with dynamic content as a copied page;

means for providing, to the first user, a locator for the copied page of the copy server, the locator allowing the first user to access the copied page from the copy server; and

means for providing, to the second user, the locator for the copied page of the copy server, the locator allowing the second user to access the copied page from the copy server, the first user and the second user viewing versions of the same copied page; and

means for synchronizing access to the copied page to block multiple users from operating on the copied page.

REMARKS

This preliminary amendment is further to the First Preliminary Amendment filed concurrently with the Continuing Application on November 14, 2003. All claims presented herein are believed to be in condition for allowance. No new matter has been added.

Claim 21 is pending.

Claims 1-20 have been cancelled.

Claims 22-46 are herein added.

Claims 21, 22, 33 and 44-46 are independent.

The new claim 22 submitted in this Second Preliminary Amendment is directed to the subject matter of allowed claim 21 in the parent case and further recites additional features and is thus believed to be in condition for allowance. The limitations of the new claim 21 are supported by the disclosure, for example,

on page 3, lines 9 through 16, and thus no new matter has been added in claim 21.

The claims in the parent case are distinguishable over the cited Jawahar reference (U.S. Patent No. 6,298,356), in addition to the other cited art of record. For the reasons cited below, the present claims are likewise distinguishable over Jawahar '356.

Specifically, in the Jawahar '356 system, when the user (e.g., user browser) wants to engage in a collaboration session with an agent browser 42, the user browser transmits the locator (e.g., URL) to a collaboration server 40 that, in turn, transmits the locator to the agent browser 42. The agent browser 42 then uses that locator (e.g., URL) to access and retrieve the copied page so that agent browser and user browser 14 both have the copied page 28 and have direct access to the copied page 28.

Jawahar, therefore, relates to methods and apparatus for enabling collaboration with web pages. Jawahar describes, for example, a method for "enabling dynamic resource collaboration or sharing when the session host and the resource host (e.g., web server) are effectively the same." Jawahar seems to assume, therefore, that a collaboration session has been established between a customer (i.e., first client) and an agent (i.e., second client), as disclosed in Jawahar, col. 19, lines 52-57. The session/resource host receives a first client request, where the first client request includes a first URL identifying a first resource such as a web page. A second URL is defined for the agent. The second URL is the same as the first URL if the first web page is not cached. If the first resource is cached then the second URL identifies the cached second resource. The customer is then provided with the first resource and the agent is provided with the second URL. When the agent issues a request including the second URL, in response, assuming the resource is a dynamic web page, the session/resource host provides the agent with the cached second resource in accordance with the second URL.

Jawahar, therefore, describes a system where a first client receives a first URL to access a resource, such as a web page. In the case where the web page

includes dynamic content, the web page is cached in a cache 82. An agent receives a second URL identifying the cached resource and accesses the cached resource using the second URL.

The present claims, in contrast to Jawahar, recite a system which employs the web page locator (e.g. URL) for allowing the second user to access the copied page from the copy server, in which the first user and the second user viewing versions of the same copied page; and further, synchronizing access to the copied page to block multiple users from operating on the copied page, as recited in added claims 22, 33 and 44-46 above and disclosed on page 3, lines 13 and 14 of the specification as originally filed.

As the remaining claims 23-32 and 34-43 depend from, either directly or indirectly, from independent claims 22 and 33, all claims in the case are deemed in condition for allowance.

In the event that the Examiner has any questions regarding this Preliminary Amendment or the Application or in general, he or she is encouraged to telephone the undersigned so that prosecution of this Application may be expedited.

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